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A Professional Sketch*

By Joseph Dorfman

With the passing of Wesley Clair Mitchell, the economics profession has lost a pioneer who established quantitative research on an enduring foundation and who broadened the horizon of economics in general. Wesley C. Mitchell was born in Rushville, Illinois, in 1874, the second of seven children. His father was a physician, and served in the Medical Corps of the Union Army during the Civil War, achieving the rank of brevet colonel. Wounds he received in that conflict forced him eventually to give up his medical practice and turn to fruit farming. He finally settled in Decatur, Illinois, and all the children helped with the farm work. But young Mitchell, as the eldest son, had special responsibilities, and thus came to know the problems of farming at first hand. Thanks in good part to the interest of a great-uncle who lived with the family, and who was a typical Yankee jack-of-all-trades, he acquired a facility in the manual arts that proved an effective outlet whenever he drove himself beyond the limits of fruitful activity in the intellectual realm.

By the time Mitchell was finishing his junior year in the local high school in 1891, and the family was seriously considering the college possibilities, it became known that a fine university would open in nearby Chicago the following year. Not only would it provide adequate training but it was also close enough to home for Mitchell to help on the farm during vacation periods. Inquiries disclosed that the senior year at the local high school would not prepare him for the entrance requirements, so he spent a good part of that year studying by himself, and with the help of a short period at a "coaching academy" in Morgan Park, near Chicago, he was able to enter the first class of the University of Chicago.

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This proved to be an excellent opportunity, for during Mitchell's years at Chicago, the university harbored a veritable galaxy of pioneering spirits. There were, to name but a few, Thorstein Veblen in economics, W. I. Thomas in sociology, John Dewey and George H. Mead in philosophy, A. A. Michelson and R. A. Millikan in physics and Jacques Loeb in physiology.

Mitchell had planned to specialize in the classics, because in the process of preparing for the entrance examinations he had been moved by the poetry of Horace. He soon shifted to economics and philosophy, but his love of satire remained an element in his work, and had not a little to do with the failure of some of his overserious readers to appreciate the subtlety of his views. In the field of economics he was inspired largely by Veblen—another satirist, incidentally—and J. Laurence Laughlin, the "head professor" of political economy; in philosophy he was attracted to Dewey and to Mead, who worked along Dewey's lines. In writing of the influence of that "disturbing genius" Veblen, Mitchell said that "no other such emancipator of the mind from the subtle tyranny of circumstance has been known in social science, and no other such enlarger of the realm of inquiry." And of Dewey, he said, "not less effectively than Veblen, though with a different emphasis, Dewey helped an economist to drag the psychological preconceptions lurking behind theories of value and distribution into consciousness, and to see how they stood the light of current knowledge."[1]

The influence of Laughlin was more complex. Of him Mitchell wrote that he "revered the body of economic doctrine expounded by Mill and revised by Cairnes."[2] Laughlin laid down the "truths" of economics in such dogmatic manner, that he aroused the critical faculties of the abler students. The saying went that they got the "truth from Laughlin and had it explained away by Veblen." But one positive aspect of Laughlin's work deeply colored Mitchell's thinking; Laughlin broke with orthodoxy on the quantity theory of money. To understand this we must look back to the great public issue of Mitchell's college years: the controversy over "free silver" and the demand for the return to the bimetallic stand-

[1] "Research in the Social Sciences," in *The Backward Art of Spending Money and Other Essays*, p. 73.

[2] *Ibid.*, pp. 73-4.

ard. The free-silver men contended that the declining trend of prices since 1873 was caused by the Coinage Act of that year which had demonetized silver, and thus resulted in depression and unemployment. Their argument was avowedly based on a simple version of the quantity theory of money: the supply of "standard money" determined the level of prices, and consequently the Coinage Act, or "the crime of 1873," by failing to provide for the coinage of new silver into dollars, was, in the face of an ever-increasing volume of trade, responsible for the "disastrous" decline of prices; a return to bimetallism would restore prices to a "stable" level. The contest reached its climax in the presidential campaign of 1896.

Laughlin had begun his academic career in the middle seventies, just about the time this issue came to the fore, and much of his energies went into attacking free silver. In the nineties he flatly denied the validity of the quantity theory. The theory that prices are determined by the quantity of money, he felt, had no deductive, and certainly no inductive foundation, and he encouraged his abler graduate students to investigate the theory. But while Laughlin contended that the "heresy" of free silver must be outlawed, he succeeded in getting his students to question what Mitchell later termed the simple "mechanical view" in which the quantity theory was presented, and to emphasize the business considerations that enter into determining prices.

Mitchell's keen interest in monetary problems pleased Laughlin, and upon his graduation in 1896, Laughlin helped him to obtain fellowships for the next three years. Mitchell spent the second of these years abroad, first studying with Johannes Conrad at Halle, and then with Carl Menger at Vienna. In 1899 he received the degree of Doctor of Philosophy *summa cum laude*. After a year with the United States Census Office, he returned to the University of Chicago as a teacher.

Meanwhile, since 1896 Mitchell had been working primarily on a subject which had been suggested by Laughlin for his doctoral dissertation; namely, the history of the greenbacks. At the time of its origin this topic was far from merely an academic one. The greenbacks were the inconvertible paper money which the United States Government issued during the Civil War, and only after

considerable controversy was legislation passed providing for their convertibility into specie in 1879. But "greenbackers" continued to have a strong following, and they rested their case on much the same grounds as the "free-silver" forces. There was no little feeling in 1896 that agitation for greenbacks would be intensified, whether "free silver" won or lost.

Mitchell's study which had begun as a short dissertation stretched into a prolonged inquiry, for he found that the debate, which had been carried on in good part on a level of irresponsible reasoning and loose fact-gathering, demanded careful statistical treatment. Instead of assembling the theoretical arguments, he began to gather all the authenticated statistical material on the subject and to combine it with speculative analysis. Seven years after he had begun his work, he published the first instalment, covering merely the war years, under the title, *A History of the Greenbacks, with Special Reference to the Economic Consequences of Their Issue: 1862-65* (1903). The guiding theoretical point of the volume was that while the existing system of money payments—he later called it the system of prices—constituted an organic whole, changes or disturbances in one area did not immediately cause equivalent changes or adjustments in other areas. Not only did he find striking fluctuations in the broad categories of wages, interest, rent and profits, but also in their subdivisions. Mitchell felt, however, that the topic had more ramifications than he had originally investigated. He therefore prepared statistical apparatus for a more thoroughgoing analysis for the entire period from 1862 to 1879, and this appeared as *Gold, Prices, and Wages under the Greenback Standard* (1908). The two volumes together are to this day the most comprehensive study of the workings and the "economic disturbances" of the greenback standard in the United States.

Meanwhile, as the political struggle over and general interest in monetary standards waned, Mitchell began to see the problem in a larger way. He was now passing through his most germinal years. There was a sharp change of scene—this was the period that he spent in the Far West at the University of California—from 1903 to 1912. He launched upon a comprehensive study of the economic

system. He had originally begun with the objective of determining the economic consequences of different monetary standards; then in 1905 he shifted his purpose to that of accounting for the changes in the price level and their economic consequences. The study matured into what he finally proposed to call "The Money Economy." He was inspired by the example of Werner Sombart's impressive *Der moderne Kapitalismus,* Georg Simmel's *Philosophie des Geldes* and, of course, Veblen's work which had given rise to his course "Economic Origins" in 1903. Whereas in his greenback studies he had experienced a quick progression from abstract doctrine to statistical analysis, there had now occurred a slower and more ripening progression from a monetary study to the study of the whole economic system in all its varied phases.

Mitchell read voluminously over a wide field, ranging from the latest studies in anthropology to the works of the as yet little-known Knut Wicksell; he prepared outlines and preliminary drafts of chapters that ran into hundreds of pages. He was especially interested in the contributions of compilers of index numbers, and the writers on crises and depressions. Index numbers, he stated in a draft, provided relatively full and exact information on the character of price fluctuations, and rendered many ideas more precise. They revealed the differences and similarities of the price changes of different articles in the same market and of the same article in different markets; the relations between wholesale and retail prices, as well as the relations between the prices of raw materials and manufactured articles. Moreover, index numbers helped to determine the extent of the influence of "cycles of business activity" on prices as against that of changes in the production of precious metals. Again, index numbers could reveal better than armchair speculation, the correspondence in the movement of the price level in different countries. Finally, the price tables helped, at least in part, to show the interrelations of the various parts of the price system—the influences of fluctuations in the price of one good on that of other goods.

As for writers on crises and depressions, Mitchell pointed out that like the compilers of index numbers, they had the advantage of starting with a concrete problem:

To them the price movements are one phase of a general dislocation of economic relations, intimately connected both as to cause and consequence with such other phenomena as changes in investment of capital, business failures, shrinkage of production, lack of employment, variations in the reserves of banks, etc. They are concerned moreover with those phenomena as parts of a process in which all the interrelated facts develop together. These facts lend to their discussions a realistic air. . . . Their explanations, so far as they succeed in giving them, are explanations of economic experience, not . . . of what would happen under unreal hypothetical conditions.[3]

Already by 1905 Mitchell was giving a course on the subject, entitled "Economic Crises and Depressions" which dealt with "recurrent fluctuations of business activity."[4]

The broad study occupied Mitchell for approximately five years, while he was also completing the second volume on greenbacks. Its aim, he wrote in an outline dated March 1908, was to work out the logic and technique of the money economy, to show how it affected men's actions and habits of thought, how they reacted against it, and how the facts developed in the inquiry were explained by current economic theory. Its defects, he felt, would be

[3] MS. outline of draft of "The Money Economy."

[4] Also exercising a special attraction to Mitchell at this time was *Industrial Democracy,* by Sidney and Beatrice Webb, because of its unique analysis of the process of determination of prices. The authors, he said, in an unpublished address in 1905, were concerned with treating the "actual forms and processes of economic life" as against the quantity theorists typified by J. Shield Nicholson's *Treatise on Money:*

[The latter's] discussion deals with an imaginary market in which various unreal conditions are supposed to exist—such for example as that money is made of dodo bones. From an analysis of this imaginary market a certain conclusion is drawn. Then by a series of modifications of the hypothesis, it is shown that the admission of various complicating factors leads to a modification but not to an abandonment of the original conclusion. Granted that Nicholson's discussion really proves his conclusion that other things being equal, prices depend upon the quantity of money, the fact still remains that his discussion does not show *how* this relation is brought about.

On the other hand, the Webbs have shown that faithful attention to the processes of economic life was feasible in dealing with economic problems; for example, take their discussion of the influence of trade unions on wages:

They inquire what are the business considerations that animate the minds of employers and their hands when making wage-bargains—how these bargains are affected by bargains which employers make with wholesale dealers about the prices of their products, how the latter bargains in turn depend on those between wholesalers and retailers and the latter bargains again on the prices that consumers will pay. Throughout the whole discussion, the Webbs are dealing not with imaginary but with real conditions, not with the motives and decisions of an hypothetical economic man, but with those of contemporary Englishmen.

lack of adequate statistical and historical data, and the generality of the discussion. "A point of view has been developed speculatively: scientific method requires that it be tested by far more extended research. That, however, is a work for many men."

From this groundwork sprang practically all of Mitchell's later products. While that inquiry never appeared as an integrated whole, various parts were developed and published. From the draft chapter, "The Price System and the Consumption of Wealth," which referred to the "pathetic plight of the consumer as a judge of goods," came the basic ideas of that delightful essay, "The Backward Art of Spending Money" (1912), with its sly questioning of the "orthodox" view of the role of the consumer. From other parts was developed "The Role of Money in Economic Theory" (1916), a critique of the neglect of the creative importance of money by traditional economics. By far the largest segment was woven into *Business Cycles* (1913).

As America experienced another crisis in 1907, Mitchell's interest in cycles naturally deepened, and in this same period his transfer to Harvard for a year in 1908 created a break that was favorable to a change of perspective. On his return to California in 1909, he initiated a detailed statistical inquiry, grounded on simple techniques that furnished the basis of *Business Cycles*. The massive volume consisted of three parts. "The Problem and Its Setting" comprised the leading current theories of business cycles, a sketch of the organization of the money economy and a year-by-year record digested from leading financial journals of cyclical fluctuations in the United States, England, France and Germany from 1890 to 1911; the second part contained statistical data and analyses. Woven out of the observations supplied by these two parts was the theoretical portion. This final part, "The Rhythm of Business Activity" presented a "realistic account of what goes on within a business cycle."[5] His theory was that business cycles were not "natural" nor were they the outcome of strictly industrial forces; rather they were a product of the peculiar institutions and habits associated with the money economy.

His primal aim in the famous treatise was to show how the

[5] *Business Cycles and Their Causes* (a 1941 reprint of Part III of *Business Cycles*), p. vi.

"technical exigencies" of the money economy subject economic activity to continual alternations of expansion and contraction. "The theory of business cycles presented . . . is a descriptive analysis of the processes of cumulative change by which a revival of activity develops into intense prosperity, by which this prosperity engenders a crisis, by which crisis turns into depression, and by which depression . . . finally leads to . . . a revival of activity." This analysis he rested primarily upon an extensive, detailed statistical inquiry. He chose this approach because the "problem is essentially quantitative in character, involving as it does the relative importance of divers forces which are themselves the net resultants of innumerable business decisions." For guidance in "the selection of statistical data, the methods of presentation, and the co-ordination of the results" he used in large part "ideas borrowed from theoretical writers or from financial journals." But all the statistical tables and the "borrowed ideas were fitted into a framework provided by a study of the economic organization of today, which showed that the industrial process of making and the commercial process of distributing goods are thoroughly subordinated to the business process of making money." The whole discussion consequently centered about the prospect of profits, or, in a period of acute strain, the avoidance of bankruptcy. The most significant factors are the prices constituting business receipts and expenses, the "volume of sales effected at the prevailing margins of profit, the need of having currency to make payments and of obtaining loans in adequate amount from banks and investors." But knowing the important factors, and the fluctuations each undergoes, is not enough. The difficult part lay in following the "interactions of these factors through all the permutations that brighten or darken the prospects of profits and make easy or difficult the maintenance of solvency."[6] So conceived, Mitchell's study was constantly subjected to the test of conformity to actual behavior of the money economy and his work constantly open to revision as more data and fruitful hypotheses appeared.[7]

[6] *Business Cycles,* p. 570; *Business Cycles and Their Causes,* p. xii.

[7] As Professor Walter W. Stewart, onetime Economic Adviser to the Bank of England, pointed out in a letter to the writer: Mitchell's procedure of "analytical narrative, tested quantitatively" was a marked advance towards the ideal of combining statistics with history.

The book was epoch making. It not only showed the tremendous possibilities of detailed quantitative study but it also led to a conception of the economic order in terms of the changing phases of the business cycle. It increasingly forced men to appreciate the mighty though unpleasant reality of the ebb and flow of business as an "activity." Soon, the literature of economics would speak of "business cycles," not of "commercial crises." Perhaps one of its greatest contributions lay in the fact that the book was the first convincing attempt to bridge the gap between the belief in general overproduction by the business community and the denial of that possibility by the main tradition in economics. But to Mitchell this treatise was only one part of his self-imposed task to study the money economy. Other parts of the design were developed after another shift in his location.

A year after resigning from the University of California in 1912, Mitchell joined Columbia University. It was felt that as a "man interested in theory and equipped to attack theoretical problems in a truly scientific spirit, and with the aid of the broadest training here and abroad,"[8] he was the long-sought successor to John Bates Clark. Mitchell's one course, "Types of Economic Theory," excellently fitted into his research program. He had long planned that a book on that subject should follow *Business Cycles*. A preliminary outline for the projected treatise began by pointing out the "need of social economic reform to the end of securing fuller opportunity for development to larger numbers." The great need, he wrote, was knowledge—knowledge comparable in certainty to that which was the basis for industrial advance. The book would attempt to characterize and criticize current theories; it would analyze the role played by instincts and institutions in the development and modification of the existing order, describe the means of studying them and applying that knowledge.

When Mitchell first came to Columbia, he had planned to devote himself to "types of economic theory" in the sense of "contemporary," but as he progressed with his work he became increasingly impressed with the need for an exhaustive study of the school from which the dominant stream of economic thought traced its origin. Thus he began a detailed investigation of the classical

[8] Letter of Henry R. Seager to E. R. A. Seligman, May 14, 1913.

school in 1916. But he intended to print this separately as an introduction to the originally projected book. He spent a number of years on that particular manuscript, but after completing a draft, with his sense of careful workmanship, he laid it aside in the expectation of polishing it up at some more convenient time. His article, "Bentham's Felicific Calculus," was published from that manuscript in 1918, and had much to do with the reconsideration of the role of Bentham not only in economics but also in other social sciences. At a much later date, he drew from that manuscript his equally revealing "Postulates and Preconceptions of Ricardian Economics" (1929).

In that early period he continued to publish pioneering articles on index numbers of security prices in the *Journal of Political Economy*. And his often reprinted "The Making and Using of Index Numbers" (1915), issued by the United States Bureau of Labor Statistics, is still a basic requisite for students of economic statistics.

Investigations for his main book were delayed by a call to public service. During World War I, he headed the Price Section of the Division of Planning and Statistics of the War Industries Board. Under his guidance a number of bulletins were prepared which supplied a large part of the information available on wartime prices and price control.

After completing his tasks for the Government in 1919, Mitchell joined his old teacher Veblen and such other leaders as James Harvey Robinson and Charles A. Beard to establish the New School for Social Research in New York City. Three years later, in 1922, at the urgent request of his former colleagues, he returned to Columbia. His course, "Business Cycles," became the training ground of an eminent group of investigators in quantitative research; his course, "Current Types of Economic Theory," enriched by his work on the classical school, appealed, both in scope and content, to the abler students not only in economics but also in the other social sciences at the University.

Meanwhile in his New School period, he helped to organize the National Bureau of Economic Research, and became its first Director of Research. Its object was to "conduct quantitative investigations into subjects that affect public welfare" with the

aim of ascertaining "fundamental facts within its field as accurately as may be, and to make its findings widely known." The first study issued by the Bureau was in the basic field of national income. Mitchell collaborated with Frederick R. Macaulay, Oswald W. Knauth, and Willford I. King to produce *Income in the United States: Its Amount and Distribution, 1909-1919*. The aim was to determine "whether the National Income is adequate to provide a decent living for all persons, whether this income is increasing as rapidly as the population, and whether its distribution among individuals is growing more or less unequal, and to sift the divergencies among the current estimates."[9]

Hardly was this completed in 1921 than Mitchell found himself and the Bureau, by the force of circumstances, moving toward a fresh attack on business cycles. The United States was again in a depression. He not only used new materials but also he now had the advantages of the knowledge that the Bureau staff had gained in studying the fluctuations of the national income. He conducted this new inquiry in much the same way as the early one, but now there were complete volumes, at long intervals, to replace the original parts. Not until 1927 was the first volume ready, *Business Cycles: The Problem and Its Setting*. It was much richer than the first part of the earlier volume. Where originally the business annals covered four countries and a period of twenty-one years, they now embraced seventeen countries, and the material went as far back, in the case of England and the United States, as 1790. It was further enriched by including from the earlier drafts of the "Money Economy," an illuminating account of "The Evolution of Business Economy." Nineteen years later, in collaboration with Arthur F. Burns, his successor as Director of Research of the Bureau, he published a portion of the second part, *Measuring Business Cycles,* which had the advantage of greatly improved techniques. Mitchell was then seventy-two years old but he kept on with the plan of completing the theoretical part, "The Rhythm of Business Activity."

The strain on Mitchell was heavy. Thus in 1941, while unwilling to allow the entire original volume to be reprinted, he gave

[9] *Income in the United States,* Vol. I, pp. v, ix.

his consent for the theoretical part, on the ground that he had "no assurance that my working capacity will last long enough to let me be in at the finish."[10] The task had already become the work of many men, as he had long envisaged.

Mitchell responded time and again to calls from the Government to serve on committees that would increase and extend objective knowledge. The National Bureau prepared for committees growing out of President Harding's 1921 Conference on Unemployment, those comprehensive surveys *Business Cycles and Unemployment* (1923) and *Recent Economic Changes* (1929); then in 1929 President Hoover appointed Mitchell chairman of a committee to study social trends in the United States, and the outcome was *Recent Social Trends* (1933). During President Franklin D. Roosevelt's regime, he was appointed in 1933 a member of the National Planning Board of the Federal Emergency Administration of Public Works, and for the next two years he served on the National Resources Board.

For his contributions to the advance of knowledge, Mitchell received high honors. He was awarded honorary degrees from the University of Paris and from leading universities in the United States. He was chosen president of the Econometric Society, the American Statistical Association and the American Economic Association; in 1938 he was president of the American Association for the Advancement of Science, an office held only once before by a social scientist. He was the first recipient, in 1947, of the American Economic Association's Francis A. Walker Medal, which was to be awarded at intervals of no less than five years to a "living American economist who has in the course of his life made a contribution of the highest distinction to economics." He was also an honorary fellow of the Royal Statistical Society, and served as George Eastman Visiting Professor at Oxford in 1931-32. The pleasure of this sojourn was enhanced by his appointment as a Fellow of Adam Smith's old college, Balliol.

At Oxford as elsewhere, Professor Mitchell made a unique contribution to the advancement of economics. Oxford was just beginning to expand work in the field, and Mitchell proved an invalu-

[10] *Business Cycles and Their Causes*, p. vi.

able counselor in this critical period to the pioneering band of tutors. He wrote home at the time:

> At present some ten of the colleges have appointed fellows who tutor in economics. Together with [D. H.] MacGregor, the only professor in our field, they constitute . . . a strong department. But of course, each tutor is engaged primarily in coaching undergraduates for the university examinations. . . . The consequence is that specialization is rendered difficult for the tutors and of course that reacts unfavorably upon the training which can be given to students.
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> Another difficulty is that if a man is "reading" economics, he cannot give much time to anything else. There seems to be little opportunity to master the tools of research. . . . One of the tutors, [R. G. D.] Allen of Balliol, is a 'pure theorist,' and another, E. H. Phelps-Brown of New, who worked last year with Henry Schultz in Chicago, aspires to be a statistician. Perhaps Allen can teach his own men what mathematics they need; but Phelps-Brown has no mechanical equipment, records or laboratory in which to conduct statistical work.
>
> These lacks and others characteristic of an early stage of development are keenly felt by the men here, and they are eager to overcome them by developing postgraduate work on a university basis. I am meeting with the full band of tutors once a week and discussing the numerous problems involved with them. It is all most interesting and may lead to significant developments.

Those meetings were in no small degree responsible for the rapid advance at Oxford.

Mitchell's constant concern was the increase and diffusion of objective knowledge in general, and quantitative research in particular. His increasing emphasis on statistical research was the outgrowth of long and painful experiences, beginning with the period of the free-silver controversy. He had been deeply impressed with the lack of anything resembling adequate knowledge for the great economic tasks during World War I. The criticisms of statistical inquiry, generally phrased in the form of limitations of statistical research, left him cold. He himself had used those criticisms in his early work when in the absence of data he often fell back simply on "qualitative analysis," but he soon felt that such criticisms were used primarily to avoid the hard labor to obtain the data. In the same way, he discounted heavily the dependability of traditional and inherited "wisdom." "By this I mean," he wrote, "that I don't believe that accumulated experience over many years

is so safe a guide in managing affairs as objective knowledge, when the latter can be attained. . . . What I really have come to think is that man's best prospect of improving his lot is knowledge resting upon analysis of human behavior as we can observe its manifestations objectively in large groups of people."[11]

Not least of his gifts was a unique talent for securing co-operative effort, whether in teaching, research or government service. He was magnanimous in sharing credit for intellectual endeavors. And he preferred to attribute error to ignorance rather than to malevolence or self-interest. He had a strong congenital faith in human decency. He was chary in imputing bad faith, and had an unusual capacity to meet the minds, and win the agreement, of businessmen and labor leaders, of statesmen and scholars. This not only gained a wider appreciation of his views but also helped him to organize large and co-operative efforts of research. In his spiritual and material encouragement to aspiring scholars of a variety of viewpoints, in his steadfast adherence to the cause of free inquiry and objective standards, and in his tenacity of purpose in pushing investigations to their roots, Wesley C. Mitchell embodied the highest ideals of the universal republic of learning.

[11] Letter to Robert S. Lynd, May 31, 1944.